

# **Inventory of montane-nesting birds in National Parks of Northwest Alaska: the spring 2001 field effort**

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## **Introduction**

All five NWAN (Northwest Alaska Network) units are estimated to host between 150 and 200 species of birds, but adequate documentation is lacking for 20-40% of these. The poorest documented avifauna is that which occurs in montane habitats, especially in the larger parks. Based on information from relatively small portions of NWAN Parks (Gill et al. 1996) and elsewhere in Alaska (Gill et al. 1999, McCaffery and Gill 2001), montane areas in NWAN are likely to provide important nesting habitat for particular assemblages of birds, most notably several medium- to large-sized shorebirds and several montane-nesting passerine species. Recent regional and national shorebird conservation planning efforts (ASWG 2000, Brown et al. 2001) have identified certain shorebird species and habitats as being of high conservation concern, primarily due to documented or perceived population declines and/or restricted distributions. In Alaska, 14 such species have been identified. Six of them nest in montane regions, including Pacific Golden-Plover, Wandering Tattler, Whimbrel, Bristle-thighed Curlew, Bar-tailed Godwit, and Surfbird. At the national level this same suite of species has been ranked similarly high: all were assigned conservation prioritization scores of 4 on a scale of 1 to 5 (Brown et al. 2001).

Despite the obvious importance of NWAN Parks to regional, national, and international populations of montane-nesting birds, particularly shorebirds, information on species distribution and abundance is limited or non-existent for most geographic areas of the parks—the exceptions being Bering Land Bridge National Preserve (BELA) and coastal portions of Cape Krusenstern National Monument (CAKR). To address these needs, the Alaska Science Center of the U. S. Geological Survey (USGS) received funding from the National Park Service's Inventory and Monitoring Program to design and implement a study that would determine the status of montane-nesting birds occurring in NWAN Parks.

## **Goals and Objectives**

The goal of this project is to document the occurrence of 90% of the species of montane-breeding birds likely to occur in NWAN Parks. We have employed a repeatable, scientifically valid sampling design suited to expansive areas with limited access to address three principal objectives:

1. Collect and summarize all existing information on the distribution and abundance of all avian species occurring on upland habitats in NWAN Parks.
2. Obtain geographic data layers needed to characterize elevation, slope, and habitat (vegetation and hydrology), and measures of seasonal green-up.
3. Determine species-specific associations between distribution, abundance, and habitat characteristics, particularly for species of shorebirds and passerines occurring on upland areas during the breeding season; project this information to obtain park-wide assessments of distribution and abundance.